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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,562	03/19/2004	Rajeev Srivastavaan	02-IND-369	7080
23990	7590	03/22/2006	EXAMINER	
DOCKET CLERK P.O. DRAWER 800889 DALLAS, TX 75380			HOANG, HUAN	
			ART UNIT	PAPER NUMBER
			2827	
DATE MAILED: 03/22/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/804,562

Applicant(s)

SRIVASTAVAAN ET AL.

Examiner

Huan Hoang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10 and 12-20 is/are rejected.
- 7) ☒ Claim(s) 5 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 071105.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claims 1-3 are objected to because of the following informalities:

The phrase "for receiving the compare-data" (claim 1, line 4 and claim 3, line 4) should be "for receiving compare-data" and the phrase "the said CAM cell" (claim 1, line 6) should be "said CAM cells" since "the said CAM cell" does not clearly refer to which one of the "CAM cells" recited in claim 1, line 3. Also, the phrase "said array of CAM cell" (claim 3, line 6) should be "said array of CAM cells".

The phrase "read-or-write operations" (claim 1, line 9) should be "read-or- write operation" since there is only one read or write operation in the second state of the same clock as recited in claim 2, line 4.

The word "Search" in "Search operation" (claim 3, line 7) should be "search".  
Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6-10, 12-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Satoh.

Satoh discloses a CAM architecture and a method of performing both a compare operation and one of a write or read operation on the content addressable memory device in a single cycle having all the elements and steps as recited in claims 1-4, 6-10 and 12-20 as follows:

an array of CAM cells (26, Fig. 2) connected to a compare-data write driver (write buffer 56, Fig. 2) and to a read/write block (Address Decoder 52 and WADR, Fig. 2), for receiving the compare-data and for reading and/or writing data in the array of CAM cells respectively;

outputs of the CAM cells are coupled to a match block (60, Fig. 2) providing match outputs signal lines that identified a match/no-match at the end of a search operation;

a control logic (timing controller 50, Fig. 2) for implementing search and address decoding operations during a first state (column 28, lines 28-34), and enabling read-or-write operations within a second state of the same clock cycle (column 28, lines 40-45);

wherein the control logic comprising a sequencing circuit (column 28, lines 50-54) that enables data comparators of the CAM array and an address decoder of the read/write block during the first state of the clock and enables the read-or-write operation of the second state of the same clock;;

The search operation and the writing of the search data are performed alternatively.

***Allowable Subject Matter***

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4. Claims 5 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art does not teach or suggest the following:

"wherein the control block causes the read/write block to partially decode a word line address during the first state of the first clock cycle and to complete decoding of the word line address during the second state of the first clock cycle." as recited in claim 5.

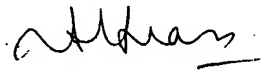
"wherein the step of decoding the word line address is partially performed during the first state of the first clock cycle and is completed during the second state of the first clock cycle." as recited in claim 11.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huan Hoang whose telephone number is (571) 272-1779. The examiner can normally be reached on Tues-Fri 8:30AM-7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (571) 272-1852. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Huan Hoang  
Primary Examiner  
Art Unit 2827

HH  
3/19/06